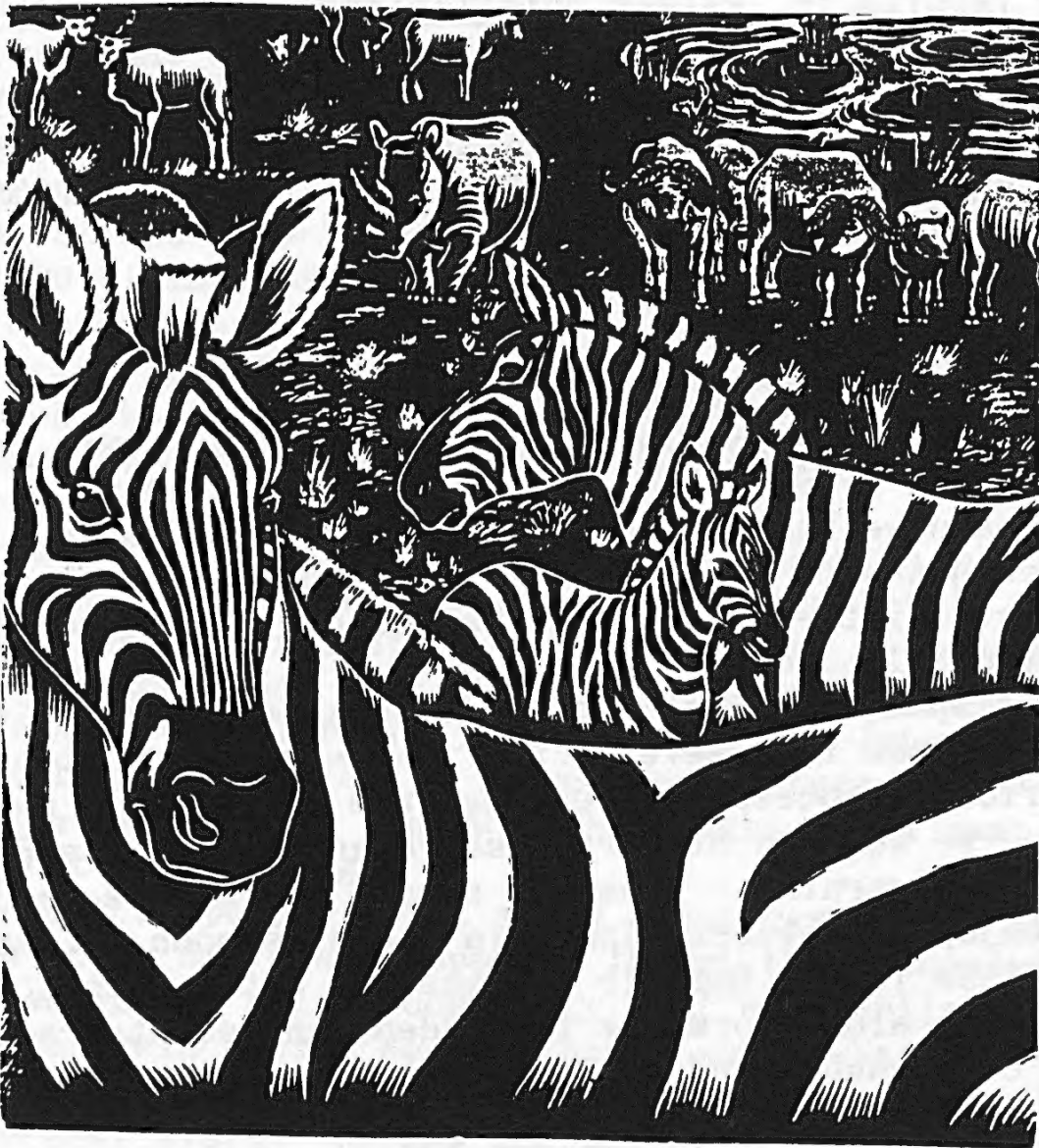


Field Naturalists' Club

of Ballarat Inc

November 1999



from Werribee Zoo pamphlet

Frank brings Africa to Ballarat!

DIARY DATES

Fri 5th Nov. Meeting. *Animals of East Africa.* Speaker Dr Frank Harrap.

Sun 7th Nov. Excursion. *Barbara Williams' property, Talbot.* Leader Ken Hammond.

Wed 10th Nov. Excursion. *Lal Lal anchor plant site, weeding etc.* CP 9-30am or Lal Lal at 10am

Fri 19th to Sun 21st Nov. *FNCB camp-out at Peterborough.* Leader Claire Dalman.

Thur 25th Nov. Committee Meeting. Helen's, 130 Moola St, 7-30pm.

Fri 3rd Dec. Meeting. *Six Million Years of Volcanoes in the Ballarat Area.* Speaker Dr Julian Hollis.

Sun 5th Dec. Excursion. *Volcanoes in the Ballarat and Daylesford district.* Leader Dr Julian Hollis.

FIELD REPORTS

There was no formal session for field reports due to the Stella Bedggood Memorial Lecture but I was personally given the following reports :- Rufous bristlebirds, Southern emu-wren and Singing honeyeaters. Sherbrooke River, Pt Campbell Nat. Pk., 9th Sept. Variety of orchids - several Caladenia sp, Donkey, Waxlip, Gnat, Mosquito Greenhoods and Sun Orchids. O' Donohue's Rd, Anglesea. 19th Sept. Many waxlip orchids amongst grevilleas and tetratheca. Paddy's Ranges, Maryborough, 23rd Sept, Carol Hall. Common myna, Yendon, 4th Sept, Kevin Andrews.

VICTORIAN FIELD NATS CAMPOUT

Hosted by Sunraysia FNC Inc at Mildura. 15th - 19th Sept '99

Peter and I went to Mildura via a stay at Mungo N.P. From Balranald we had a long but fairly smooth unmade road - better than Mungo to Mildura. We thoroughly enjoyed our Mungo time, especially the Walls of China and our first good look at a well named Splendid wren.

The campout was well run and enjoyable. Day 1 (Thurs) most people chose from several half day excursions with several coloured ribbon processions leaving from Sunraysia's own clubrooms. We went to Stewart Reserve and Red Cliffs Scenic Reserve in the morning - chestnut rumped thornbills feeding babies - enjoyable observation. In the afternoon we went to the Australian Inland Botanic Gardens and after a talk we were lucky to drive along normally forbidden management tracks. I loved the bush chapel and Sturt Desert Pea. Later the wind picked up and created a horrid dust storm. We braved a short drive around Lake Ranfurley but decided sandblasting was not a good idea. The storm moved a planned bush meal / astronomy night to local TAFE rooms. We had a brief telescope peek at the moon then an excellent, honestly fascinating talk about astronomy by a local USA lecturer.

Friday was a bus trip to the Salt Interception Scheme ponds and a good look around Mallee Cliffs NP (NSW) not normally accessible. Another Splendid wren, but shy this time. In places flowers were abundant, others scarce - rather like Mungo. At 4-30 the VFNCA meeting began back in Mildura. Brief details - Ballarat to host Spring 2002 campout. Leadbeater's Possum to be VFNCA logo. Alice Springs July 2000 campout - details. Individual newsletters for members? Two brief ones post campouts. March 2000 long weekend campout hosted by Geelong, Spring in Albury/Wodonga. At 7-30 we were wonderfully entertained by Sun Nats members. Excellent speakers, brilliant slides, supper and cutting of Sunraysia's 50th birthday cake.

One Mr Greg Binns was a foundation member.

Saturday was a full day bus trip - at least 250km. First stop was Koolong Water Treatment works - good birdwatching. We headed to the Millewa - a dryland farming area west of Mildura via Werrimull. Lunch and a good wander at Mallanbool Flora Reserve. Next to Meringer where there is an excellent Pioneer Park and Historic Centre. We had to manage with only about an hour, led by Margaret Kelly, a local author, historian, naturalist and photographer. We bought her lovely book "Discover Victoria's Mallee". This local initiative -volunteer created and managed is impressive. A quick look at Ned's Corner country before return. That night was a dinner (how did they cook those spuds?) and speaker Dr Jeanette Hope reflecting on Field Nats Clubs past, present and future. Where are all the young people?

Sunday morning was birdwatching at King's Billabong Wildlife Reserve - pleasant and a good bird total. Our leader gave us tickbox birdlists - helpful. After a \$2.00 counter lunch we headed back into NSW along tracks into bush looking for Gilberts whistlers (no) and went to the John Hobb's Eremophila Patch. Pretty, flowers everywhere as well as chats, black honeyeaters and others. That night was a camp oven meal finale but we didn't go.

About 50 people spent a few great days being shown areas unknown to us by locals happy to impart their knowledge and understanding of mallee country. Well worthwhile! Well done Sunraysia Field Nats. We felt happy about what we saw - you could not go on all the trips. The weather was lovely except for the dust storm. We saw the mallee soil leave Mildura, you saw it arrive in Ballarat and it greeted us on our return over our yard, windows etc. We travelled back along the River Track all through the Hattah/Kulkyne NP. This was sometimes rough but quite manageable and with lovely Murray River views, trees, flower carpets and birds, a lovely alternative to the highway option.

Claire Dalman.

OUTING TO ENFIELD FOREST - MONMOUTH MINE AREA - 3rd OCT

The day dawned bright and sunny. After assembling at Creswick Plaza Carpark five cars (thirteen members) departed. We turned off into Napoleons (Colac) Rd, subsequently turned left at Clarke's Rd to Monmouth Mine site on LHS. Brian Andrews explained the forest on RHS (Enfield Forest) was all regrowth. The land having once been all cleared for timber, for gold mines closer to Ballarat. We successfully found several small stands of Dainty and Common Bird Orchids and the

hybrid Bronze Bird Orchid. In fact the Common Bird Orchid was all over the place but in some stands 20 - 30 *C. trapeziformis* to one *C. pesscottiana* hybrid.

A powerful owl observed on a previous outing in this area was not observed but other bird species observed were rufous and golden whistlers, grey fantail, grey thrush, white browed scrub wren, white naped honey eater and the descending notes of the fantail cuckoo were heard. Also many native plants in bud or flower - sun orchids, little green seed heads of honey pots, narrow leaved bitter pea *Davesia leptophylla*. Ken McDonnell pointed out the white hairy petals of the bearded heath. There were also pink bells *Tetratheca cilliata*. Two spider species were observed, both the size of the old 2c coins, one with white tail (but not the notorious white-tailed spider) Brian Andrews observed a minute jumping spider. Other observations - bronze caladenia, candles *Stackhousia monogyna*, yam daisy, early nancy, waxlip orchid (John Gregurke), rice flowers just starting to flower, galls on a eucalypt seedling (Claire Dalman), golden moth, nodding greenhoods and *Hardenbergia violacea*.

We adjourned to Monmouth dam for lunch to a cacophony of croaking frogs and plenty of mosquitoes. Also observed here were white eared honey eater. Ten members then headed south, it was easy walking. We observed Wax lips *Glossodia major*, black anther flax lily *Dianella revoluta*, tall greenhood *Pterostylis longifolia*, numerous native violets (2sp) and pink heath (still flowering, just hanging on). The forest was interspersed regularly with cherry ballart (fruit mature about Christmas). More bird orchids and creeping bossiaea were observed. Matt rush (including spiny matt rush), hedge wattle *Acacia paradoxa*, running postman, love creeper, small grass tree *Xanthorea minor* and a maroonhood *Pterostylus pedunculata* were all noted. Fauna observed were male scarlet robin, grey kangaroos, white throated tree-creeper, kookaburra (heard). There were plenty of yabby holes in the gully, they were of two types (i) open at ground level and (ii) mound openings intricately constructed with mud globules. Brian Andrews had seen a pardalote constructing its burrow but we did not see the bird. Swamp wallaby observed. An attempt to re-observe what is thought to be antechinus was an anti-climax. Several deep shafts built by Canadians in the 1850s for ventilation of mines were explored and an old puddler or Chilean Mill foundation built by William Harrison, still in fair condition was noted.

We arrived at "civilization" (Colac Rd) at the site of a former eucalyptus oil distillery (operated 1911 - 28) which was

p4

adjacent to an embankment holding back a pond with a lot of rushes - all that remains of the distillery is two iron tanks on concrete bases. We all enjoyed billy tea at this location, then set off for home late in the afternoon.

Tony Johns.

INSECT PROTECTION MECHANISMS

John Landy presented this years Stella Bedggood Memorial Lecture to an audience of about 80 people. Despite the fame that he has achieved from his success at running, he admitted to us that he had developed far more interest in, and achieved far more satisfaction from, his general interest in nature and specific interest in insects. He started collecting butterflies when he was 10 and now at the age of 69 he was still enthralled by the wonders of nature. With about 86 000 named insects there will always be plenty to keep anyone who studies them occupied and interested!

With so many insects its natural that a lot of things want to eat them! We were shown slides of insectivorous flame robin and willie wagtail, the latter often goes along eating moths, leaving behind a trail of discarded, uneaten wings. The larvae of wood boring longicorn beetles would seem to be safe, deep inside the trunks of the trees that they are eating, but by hearing or touch, yellow-tailed black cockatoos are able to detect them, rip open the trunk and eat the larvae. The long-tailed wasp *Megalyridae* can also detect wood-boring caterpillars, it can insert its ovipositor through the wood and deposit its eggs in the hapless larva. To add to the list of predators there are lizards, spiders - probably the most important, other insects such as robber flies, reduvid bugs, praying mantis, glow worms etc. If that isn't bad enough plants get in on the act with sundews, fairies aprons and pitcher plants. Fungi also take their toll, an example being the vegetable caterpillar *Cordyceps gunnii* which live in swift moth caterpillars before the fruiting body emerges.

With so many things trying to eat them, insects have evolved many protection mechanisms. The simplest method is simply a thick, hard coat as possessed by beetles and weevils. Many insects construct shelters ie galls, lerps and the stick shelters of the case moth. Repellants are often used, the rose beetle produces a rash if handled, the orchard swallow tail butterfly produces a pungent smell, some beetles exude hydrocyanic acid and the caterpillar of the cup moth can deliver a painful sting.

Camouflage is important and many insects show an uncanny knack at landing on a matching background! The apple hanging

moth looked just like a leaf - as did several others. Stick insects and looper caterpillars looked just like the twigs they were on. The symmetry of insects tends to give them away, but some dead-leaf moths have developed assymetric bodies and wings which makes them much harder to spot.

Several insects are distasteful or even poisonous, an example being the wanderer butterfly, its caterpillar obtaining poisonous compounds from the milkweed that it eats. Such insects are usually brightly coloured, which in turn also acts as a deterrent. Some moths emit sounds which indicate to bats that they are distasteful. Several insects use bluff, for instance butterflies and moths with eyespots ie the old lady moth and emperor gum moth. Some like the ictinus blue butterfly form symbiotic relationships with ants. Some, like spitfires get safety from numbers - and they also exude eucalyptus oil as a repellent. Several rely on mimicry, the classic being a New Guinea butterfly *P. paradoxia* which existed in three forms, each form imitating a different poisonous crow butterfly.

My favourite however was the mountain grasshopper *Acripeza reticulata* which had excellent "dry leaf" camouflage but if that failed it could raise its wing covers to reveal bright bands of red and blue on a black body - quite scary, but if the bluff failed it still had a bladder full of yellow repellant liquid!

We all agreed it was an excellent talk with splendid slides!

BDA

..... And from Margaret :-

The excellent presentation from John Landy prompted me to write the following:-

We spent the winter at Coffs Harbour and are fortunate in the friendship of Alex Floyd and his wife Cynthia. Alex and Cynthia are the driving force and founders of the Botanic Gardens in Coffs Harbour and have now established a reputable Herbarium, which is used by the region. The Forest Commission. CH. gave their entire collection to this Herbarium. This is the respect Alex Floyd holds within the region and Australia.

We were fortunate to accompany he and Cynthia on an excursion to see the rare grass *Alexfloydia repens* in the locality of Bonville and Boambee. As John Landy said, we are losing many insects owing to the destruction of their habitat. An example of this is *Ocybadistes Knightorum*, common name Knight's Dart.

A food plant for the larvae *O. Knightorum* is identified as the rare and locally restricted grass *A. repens*. Adult

females of *O. knightorum* were observed ovidepositing on grass at three localities previously recorded for this grass, east of Bonville and near Boambee, NSW. The conservation significance of *O. knightorum* and its food plant is under threat, as the local council are planning a children's playground on this site.

The butterfly was absent from similar environments where this grass was absent. Moreover the grass proved to be dependent on small patches of coastal peat, similar to those in the region between Fraser Island and Cooloola National Park in south eastern Queensland. One site supporting the butterflies occupies an area of only about 600m².

Margaret Martin

A GOOD DAY AT BAMGANIE!

We started fairly casually with a tour of Lyndsay's garden and then Lorraine treated us to morning tea. We then headed off towards Bamganie forest. First stop was at a group of 6 mines, including the Duke of Wellington, quite substantial brick structures were still remaining. Next stop was at a small rise, where we admired the view - from Mt Anakie, the Barrabool Hills and then way out into the western district. The patchwork of paddocks with green spring grass was interspersed with the blue/grey of newly planted blue gum plantations and the brilliant yellow of canola crops.

Arriving at the forest, the first thing to catch my attention was a brilliant, shiny blue forester moth *Pollaninus viridipulverulenta*. We also saw blue squills, twining fringe lillies, guinea flowers, pink and blue sun orchids, a dead koala which appeared to be covered with rabbit dung but closer inspection showed that the dung was in fact beetles! An echidna was busy trying to dig itself away from us. There were quite a few horse manure fungi, some intact, some disgorging their spores. A fast moving ant had 8 legs - it was an ant mimicking spider! Time for lunch and Lyndsay kept us entertained with endless jokes and yarns.

After lunch I decided to get a photo, Lyndsay was coerced into tapping a hollow branch as if something was inside - imagine our surprise when out flew an owlet nightjar! We then headed down to Woodbourne Creek, past mats of matted bush-pea with bright flowers. The creek was cool and pleasant, water striders skated on the surface and there were maiden hair ferns on the bank, and plenty of birds in the trees.

We puffed back up the hill in the afternoon sun. Lyndsay searched through the bracken till he found some iridescent (bronze) caladenias and there was heath parrot pea *Dillwynia*

glaberima, black (sawfly?) larvae with a bronze sheen, nodding chocolate lily, a tiered lichen (*Cladonia verticillata?*) and a friendly looking koala. The piping call of a pallid cuckoo finished a fine excursion!

Brian Andrews

OCTOBER POSER ... ROGER'S CONUNDRUM.

Roger's conundrum had me stumped for a while but then it occurred to me that maybe the birds were pointing north while actually being blown south by the strong wind. If this was the case the birds would virtually be getting a free ride from the wind and at the same time being presented with a smorgasbord of insects being blown past. This would result in them achieving their desired migration and necessary food intake with a minimum of energy expenditure.

However Roger seems adamant that the birds are actually moving north, which means that my theory is scuttled! Roger has suggested two other possibilities (i) they fly south with the wind at night, or (ii) fly south in another part of Victoria (eg Big Desert / far west Vic) until hitting the coast and then moving along the coast for a while before heading north over Ballarat*. Roger thinks that the first is the most probable, but asks, "whichever is correct, what's the point of it all anyway? Why should they bother? Only about once in ten years do they descend to alight / roost." * I've often noticed fan tailed cuckoos south of here before Ballarat.

Roger also says, "most small bushbird migrants travel at night, so a nocturnal movement by W.B. Wood-swallows would not be surprising, yet they go back again in daylight. Is it all one long trip? Presumably, but who knows?"

As you can see, we do not claim to have a solution! Maybe further thoughts and further observations can provide one!

Roger Thomas / BDA

NOVEMBER POSER ... ANOTHER FROM ROGER.

Why do Red Gums drop large branches on hot calm days?

Roger Thomas

-----***----- FNCB -----***-----

Meetings are held at the Ballarat Horticulture centre, corner of Gregory and Gillies Streets. ie. the NW corner of the Botanic Gardens. VICROADS 254 P8, commencing at 7-30pm

Excursions depart from Creswick Plaza, VICROADS 255 M10, at 9-30 am, unless specified otherwise.

Committee: Claire Dalman (President).. , Greg Binns (Vice President).. , Pat Murphy (Secretary).. , John Gregurke (Treasurer).. , Brian Andrews (Editor).. , Helen Burgess, Maureen Christie, Lyndsay Fink, Carol Hall, John Wildren.

Postal Address: PO Box 328W, Ballarat West.3350

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ARCHITECT
27/398 SMITH ST
COLLINGWOOD 3066
PH 4161 955 FX 416 0508

KEY

- MULTI-PURPOSE PATHWAY
- VEHICLE ROUTES
- TRAM LINE
- FORESHORE CARPARKING
- MAJOR ROAD ENTRY
- BICYCLE LANE ON ROAD
- SHORT CUT ROUTE

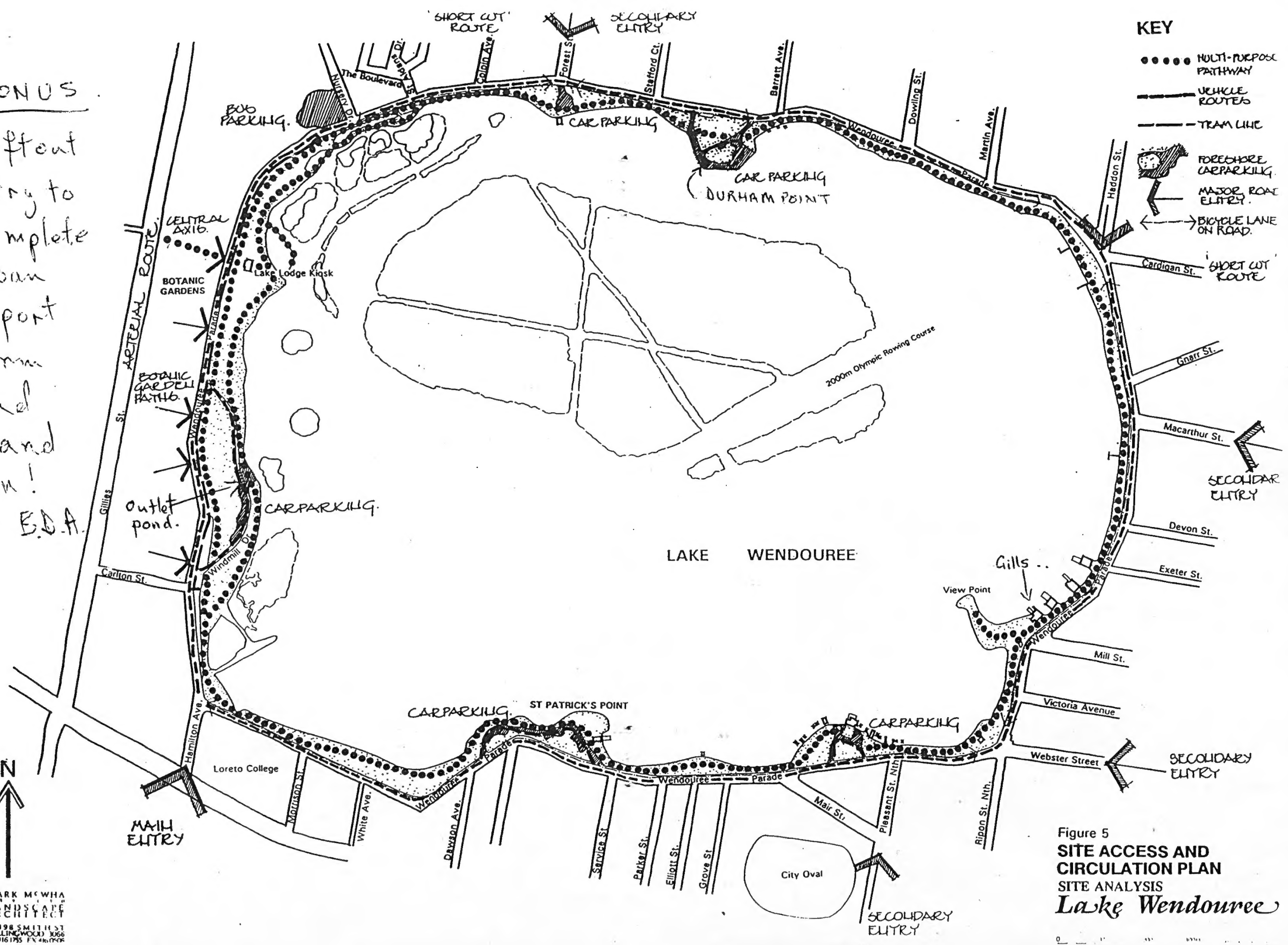


Figure 5
SITE ACCESS AND CIRCULATION PLAN
SITE ANALYSIS
Lake Wendouree

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SWAN REPORTS.

<u>DATE.</u>	<u>BAND N^{ds}.</u>	<u>WHERE. (Use map)</u>	<u>OTHER SWANS/CYGNETS</u>	<u>COMMENTS.</u>

Hand completed (or part completed) forms to John Gregurke or Brian Andrews or post to Ken (Oct N.L.)

